Course	GEOS 300W: *Earth System Science* (Spring semester, 2019) (W is for approved writing course.)
Course Goal	To understand fundamental Earth system processes and interactions, with emphasis on climate change.
Instructor	Dr. Shane D. Mayor
Lectures	Mon. and Weds. from 4:00–5:15 PM in PHSC 130
Office hours	Mondays and Wednesdays from 2:00 – 3:00 PM or by appointment (Please e-mail first. If not in office, look in lab: PHSC 128.)
Office	PHSC 117
Mailbox	Department of Geological and Environmental Sciences office (PHSC 217)
Phone	530–898–6337
E-mail	sdmayor@csuchico.edu
Class webpage	http://physics.csuchico.edu/~sdmayor/teaching/GEOS300_S19/index.html
Required Book	*Earth System Science*, 3rd Edition (©2010, Pearson Education, Inc.) by Lee R. Kump, James F. Kasting, and Robert G. Crane. Link. It is on 2-hour reserve at the library.
Course Description	This is a lecture-based writing course without labs. The pedagogical methods are centered around lectures, reading, and writing. There may be some calculations that require plugging values into relatively simple equations. The structure of topics covered is based on the required book. It is highly advisable to take notes in class since lectures may explain details beyond what is covered in the book. It is critical to procure and read the book. Subject matter testing will be done with multiple choice quizzes and exams. In addition, students will be required to read journal articles and write and revise an essay on a topic of their choice as long as it is related to Earth system science.
Prerequisites	Completion of GE Written Communication (A2) requirement; CHEM 107 or CHEM 111; PHYS 202A or PHYS 204A or PHYS 341.
Blackboard	The instructor periodically communicates to the entire class via e-mail through Blackboard. You will be required to submit some assignments through Blackboard TurnItIn. Some teaching materials may be posted on Blackboard. Your scores will be kept on Blackboard.

Attendance	A sign-in sheet will be circulated at the beginning of most lectures when a quiz or exam is not scheduled. Students must sign the sign-in sheet for attendance credit. A significant portion of your final score will be based upon attendance. Up to three exemptions will be granted. Please inform the instructor by e-mail BEFORE class if you cannot attend due to illness or for any other reasons. Missed exams cannot be made up unless the instructor has agreed before the exam date and the student has a serious and compelling reason.
Late assignments	Scores on assignments received late will be reduced by 20% of the assignment value per day. For example, a 100-point essay completed perfectly will receive only 80 out of 100 points in the 24 hours following the due date; 60 out of 100 points in the 24 - 48 hours after the due date, and so on.
Course Grade	The course grade may be based on a number of homeworks, quizzes, exams, and assignments such as essays. Attendance will also be a factor.
Dropping	You may drop (or add) without obtaining permission until Friday, September 7. From September 8 to September 21, you must obtain permission from the instructor to drop. After Friday, September 21, you will need a serious and compelling reason to drop and your request must be approved by the Department Chair and the College Dean. Students adding after classes have started are responsible for obtaining a syllabus and lecture notes and making up any missed quizzes and assignments.
Etiquette	**Please do not eat in lecture.** The noises and smells may be a distraction for your peers. Plan your day so that you have adequate nourishment before class. **Please come to class on time.** Walking in several minutes late is a distraction for everyone. We understand if it happens rarely due to extraordinary circumstances, but chronic lateness projects lack of maturity and respect and may be taken into account for your course grade. **Please silence mobile phones** and avoid texting during lectures. **Please do not chat with your neighbor during lecture.** It is very distracting for others in the course who are trying to listen to the instructor. **Use of phones is strictly prohibited during quizzes and exams.**
Plagiarism	Plagiarism is a serious violation of academic integrity and when detected will result in a failing grade for the course and an incident report submitted to the Office of Student Judicial Affairs. For more information on plagiarism, please see the university's Academic Integrity webpage. If you still have a question about what plagiarism is and how to avoid it, please contact the instructor by e-mail or visit during office hours.
Disabilities	If you need course adaptations or accommodations because of a disability or chronic illness, or if you need to make special arrangements in case the building must be evacuated, please make an appointment with the instructor as soon as possible, or see me during office hours. Please also contact the Accessibility Resource Center (ARC) as they are the designated department responsible for approving and coordinating reasonable accommodations and services for students with disabilities. ARC will help you understand your rights and responsibilities under the Americans with Disabilities Act and provide you further assistance with requesting and arranging accommodations.

Tentative Writing project (Details to follow soon)

This is a writing proficiency course and to satisfy the requirement you will write one paper this semester. However, the best writing often results from having time to reflect on it and revise the document many times. Therefore, your grade will be based upon steady progress throughout the semester and the final paper that will represent a culmination of your efforts. The following series of intermediate assignments is designed to help you make progress on your final paper by starting off small, and through several major revisions, write a paper that you are proud of.

Writing Assignment #1: January 23 to February 8. (16 days)
Write one paragraph ranging from 125 to 250 words on a subject related to Earth system science that interests you. No references are required in this first version. Include a title and your name, centered, at the top of your document.

Writing Assignment #2: February 9 to March 13. (32 days)
Take assignment #1 and revise and expand it to 250 to 500 words. Include 3 peer-reviewed references.

Writing Assignment #3: March 14 to April 11. (29 days)
Take assignment #2 and revise and expand it to 500 to 1000 words. Include a minimum of 6 references (that include the 3 references from assignment #2.) If you change your mind about a particular reference, you can replace it with an equal or better one. You may also include one figure.

Writing Assignment #4: April 12 to May 10. (29 days)
Take assignment #3 and revise and expand it to a minimum of 1500 words (6 pages double spaced).

References
The minimum of 6 references must be from any of the following periodicals: anything published by the American Meteorological Society (AMS), American Geophysical Union (AGU), Nature, Science, or the Proceedings of the National Academy of Science (PNAS).

GEOS 300W, *Earth System Science*, Spring 2019, List of meeting dates and **tentative** schedule.

Weds.	23	Jan.	Review syllabus. Begin Chapter 1:
Mon.	28	Jan.	
Weds.	30	Jan.	Begin Chapter 2: Daisyworld
Fri.	1	Feb.	**Last day to add or drop without permission from the instructor.**
Mon.	4	Feb.	
Weds.	6	Feb.	Begin Chapter 3: The Global Energy Balance.
Mon.	11	Feb.	
Weds.	13	Feb.	
Fri.	15	Feb.	**No adding or dropping after this date without Chair's and Dean's approval.**
Mon.	18	Feb.	
Weds.	20	Feb.	
Mon.	25	Feb.	
Weds.	27	Feb..	Exam #1 on Chapters 1 - 3.
Mon.	4	Mar.	Chapter 4: Atmospheric circulation
Weds.	6	Mar.	
Mon.	11	Mar.	
Weds.	13	Mar.	
Mon.	18	Mar.	Spring break. No classes.
Weds.	20	Mar.	Spring break. No classes.
Mon.	25	Mar.	
Weds.	27	Mar.	Chapter 5: Oceanic circulation
Mon.	1	Apr.	César Chávez Day. No classes.
Weds.	3	Apr.	
Mon.	8	Apr.	
Weds.	10	Apr.	Exam #2 on Chapters 4 and 5.
Mon.	15	Apr.	Chapter 6: The cryosphere
Weds.	17	Apr.	
Mon.	22	Apr.	
Weds.	24	Apr.	Chapter 7: Circulation of the Solid Earth
Mon.	29	Apr.	
Weds.	1	May	Chapter 8: Recycling of the Elements
Mon.	6	May	
Weds.	8	May	Review week
Mon.-Fri.	13 - 17	May	Final Exam week. Final comprehensive exam date and time TBD.